

PRE-SERVICE TEACHERS' ATTITUDES TOWARD LANGUAGE DIVERSITY

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This study examines pre-service teachers' attitudes toward language diversity and linguistically diverse students. Two hundred seventy-one teacher education students were surveyed to determine relative effects of demographic, mediating variables and psychosocial variables on language attitude as measured by the Language Attitudes of Teachers Scale (LATS). Independent variables include gender, age, race/ethnicity, teacher certification sought, region, psychological insecurity, cognitive sophistication, and helpfulness viewpoint. Research questions are established and methodology is outlined. A review of related literature places the study in the context of research with a broad interdisciplinary perspective and then links the study to other research relevant to the field of education. The findings of the study indicate that gender, race/ethnicity, teacher certification sought, political ideology, psychological insecurity, and cognitive sophistication contribute significantly to the variation found in attitude toward language diversity. The paper concludes with analyses and discussions of the significant variables and suggestions for application in teacher preparation.

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CHAPTER 1

INTRODUCTION TO THE STUDY

Debate rages over the ability of the education system to meet the needs of an increasingly diverse student population. The many different languages and dialects encountered in kindergarten through twelfth-grade (K-12) schools along with accompanying cultural differences are in the forefront of concerns facing our schools. “Threaded through the public, professional, and political conversation is an explicit concern for educating all students to higher levels of understanding and competence once reserved for the privileged few.” (Melnick & Zeichner, 1998, p. 88) Teacher education has to address the scope of diversity that teachers will face amongst their students. (Darling-Hammond, Wise, & Klein, 1997) However, a virtual consensus by business and political leaders, joined by the media, is that America’s schools are failing. (Genesee & Cloud, 1998) Thus, teacher education is challenged to change this situation for future teachers. The question now is how will educators address the overwhelming concerns of the public. The task of teacher education programs is to prepare pre-service teachers for the challenges of the diverse society reflected in K-12 schools. (Genesee, Fred & Nancy Cloud, 1998) A closer look at pre-service teachers’ attitudes about linguistic diversity has the potential to illuminate the direction and focus of teacher education programs.

K-12 education challenges often result from linguistic and cultural diversity in the student population. A case in point is the controversy over the best way to educate limited English proficient (LEP) students. Although research supports the value of bilingual and English as a second language (ESL) educational opportunities for the cognitive

development of the second language (L2) learner (Freeman & Freeman, 1992), in California on June 2, 1998, voters passed Proposition 227, English Language in Public Schools, Initiative Statute. This referendum requires that, after a 1-year sheltered English immersion program (SEI), all instruction in public schools be in English. Some of the concerns associated with this development include: (1) worry that this vote would give impetus to other anti-bilingual education movements around the United States; (2) questions about the political and social motives behind the referendum; and (3) debate over the most appropriate way to educate Limited English Proficient (LEP) students.

Some of the initial fears about California Proposition 227 have been allayed. According to the Los Angeles Times (Sahagun, L., January, 1999), Los Angeles Public Schools administrators, parents, and students report positive results so far. Policy interprets the law to allow for parents to override the 1-year limitation for an English immersion program as well as to request a traditional bilingual program. Also, local schools with the parents' consent can determine the need for a second year of English immersion. One year after implementation of Proposition 227, California's Standardized Testing and Reporting scores have risen 19 percent overall, according to recently published results. (Geyer, 1999)

Nevertheless, the controversy over how to educate LEP students lives on, as revealed by the heated debate in recent Phi Delta Kappan issues concerning the most appropriate way to educate LEP students. The November 1998 issue contained an article by education consultant Keith Baker that described several programs around the United States using structured English immersion (SEI) as an alternative to bilingual programs

and implied they are superior to bilingual education. He discussed California Proposition 227 and suggested that only SEI has the possibility of successfully transitioning California students to all-English classes in the year allowed. (Baker, 1998)

In return, Stephen Krashen, with the University of Southern California, along with Nicholas Meier, a California resource teacher, fired back responses to Baker's article in the May 1999 Phi Delta Kappan. Meier and Krashen accused Baker of misrepresenting the results of research to support his position that SEI is superior to bilingual approaches. (Meier, 1999; Krashen, 1999) In the same issue, Baker defended and reiterated his position. However, he said that he did not claim that SEI is superior, but that he ascertained that it is an effective approach. (Baker, 1999) As the number of LEP students increases in the public school population, different approaches will be espoused, and political and demographic realities will drive differing philosophies and opinions. Teacher education is in the midst of the controversy and will be required to prepare future teachers to understand the issues and work for the success of students with diverse linguistic and cultural orientation.

Thus far, an anti-immigrant, English-only attitude does not appear to have spread to the state of Texas. Jaime Zapata, associate director for public affairs for the National Association for Bilingual Education, thinks bilingualism is highly valued in Texas. (Boney, B, 1998) The structure of the Texas government is less amenable to making changes to the current mandated bilingual education for second language (L2) learners because Texans cannot initiate referendums, as is possible in California. Therefore, any

changes would have to originate from lawmakers and educational policy makers, and special interest factions are less likely to influence these groups. (Boney, B, 1998)

At this point Texas does not appear to be going in the same direction as California in terms of legislation. The prognosis for education in Texas of linguistic and culturally diverse students is hopeful; however, teacher education programs have a demographic reality to address. According to Andrew S. Latham in Educational Leadership (April, 99), the student population is growing more diverse, but the teaching force remains primarily white. Most of the LEP children will be immigrants, speaking a large number of first languages, and many will be in regular classrooms. (Byrnes et al., 1996) Seventy-seven percent of the teaching force in Texas is white; only 45 percent of the students are white. Fifty-five percent of the student population is comprised of African American, Hispanic, and other racial and/or ethnic minority groups, many of whom are linguistic minorities. (Texas Education Agency, 1994; Texas Education Agency, 1998)

Teacher education programs present an even greater mismatch with the student body of K-12 schools and the future teaching force. Although approximately seventy percent of those taking the Texas state teacher certification exam between September 1997 and September 1999 were white, the test takers who were sponsored by alternative certification programs influence that number. Alternative certification programs actively recruit people outside the field of education from diverse ethnic, racial, and cultural backgrounds as well as people with expertise in high-need areas such as bilingual and ESL education. (Roberts, 1999) Approximately eighty-eight percent of test takers from the same time period from the sample's university teacher education program were white,

reflecting the ethnic/racial make-up of students in the university. (Naugher et al., 1999) Consequently, language attitudes of Texas' future teachers are important because of the gap between the linguistic and cultural backgrounds of pre-service teacher education students and the students they will encounter in their teaching careers.

In the 1997-1998 school year in Texas, 14 percent of the students were African American, 38 percent were Hispanic, and 3 percent were Asian/Pacific Islander, Native American, and/or other for a total of 55 percent. (Texas Education Agency, 1998) In the 10-year period, 1987-1988 through 1997-1998, the number of students in bilingual or ESL programs has doubled to 12%. (TEA, 1998) This pattern of increasing diversity is projected to continue and is supported by an examination of the ethnic makeup at each grade level. Relative greater Hispanic enrollment and lower white enrollment at each grade level from grade 1 through grade 12 indicate the percentage of linguistic minorities will continue to increase. Demographic data concerning minorities at the high school level are skewed by the much higher retention rate for minority students in the ninth grade as well as the higher drop out rate for Hispanics. (Texas Education Agency, 1998) However, the trend is evident, and greater ninth-grade retention and high Hispanic dropout rates further illustrate educational problems associated with diversity issues. Studies have argued that the demographic makeup of the teaching force is a factor in "...learning outcomes for minority students." (Texas Education Agency, 1994) Schools with faculty and student bodies that are similar have a higher percent of students passing the TAAS tests. (Texas Education Agency, 1994) "The disproportionately high failure rates among minority students are indicators of both a failure of communications

strategies used by teachers and a failure of the learning setting to accommodate diversity.” (Hollins, 1993)

Future Texas educators have an exceptionally difficult assignment because of broadening linguistic variance and cultural diversity amongst Texas residents, and specifically the school population. Some basic trends in the population of Texas and resultant forecasts can be summarized as follows:

- (1) Non-Anglos will constitute a majority of the population, not only amongst the K-12 population as currently is the case, but also in the general population.
- (2) The population will be poorer and less educated.
- (3) There will be a reduced demand for traditional educational services.
- (4) Increased human services will be needed.
- (5) Government costs will rise.

These trends and forecasts are based on sociocultural observations and statistical analysis of the non-Anglo populations in terms of their economic and educational patterns.

(Murdoch et al., 1997) Teacher education must respond by gathering information that can guide preparation of these teachers of the future.

In 1990, the Anglo school population in public elementary and secondary schools was approximately 55%. (Murdoch et al., 1997) Anglo enrollment is projected to fall to 29.9% by 2030. (Murdoch et al., 1997) The influence of increased immigration, in particular of Hispanic students, suggests the rapid growth of bilingual, ESL, and immigrant school programs. In fact, Hispanic enrollment in Dallas Public Schools is

currently up to 51.8 percent from 33 percent in 1990. (Trejo, 1999) The Texas Challenge: Population Change and the Future of Texas (1997) concluded with the following observation, "...if current relationships between minority relationships and access to and possession of socioeconomic resources do not change, the demand on services in Texas is likely to be substantial..." (Murdoch et al., 1997, p.222) Therefore, the Texas challenge is to deal with the projected demographic changes in a way that results in a population that is able to compete in a global economy and achieve personal success. (Murdoch, 1997) The challenge for teacher education is to prepare pre-service teachers to provide effective and appropriate educational opportunities for this increasingly diverse group so they may achieve success in society and in the marketplace.

In addition to demographic shifts elevating the importance of language attitudes to teacher education, other issues such as the recent furor over "ebonics" (Wolfram, 1997; Fox, 1997) and the claims of over-representation of minorities in special education highlight its significance. Another example of a language related education issue is the contention that a teacher's view of a student influences the student's self-concept and, thus, the student's behavior. As a consequence, the student may perform very well when the teacher holds high expectations. (Okiabor, 1999) Thus, a teacher's attitude toward linguistic diversity is salient because an increased responsiveness to linguistic diversity would be helpful to educators in analyzing appropriate ways of assessing and working with diverse students. (Baruth & Manning, 1996) These issues serve as reminders of the emotional impact and the importance of language and dialect in the classroom, and the

necessity to prepare pre-service teachers to deal effectively with the entire range of language diversity that will be encountered. (Wolfram, 1997)

Rationale

The theoretical perspective of the sociocultural theory of learning establishes the central nature of the social relationship between teachers and their students. A sociocultural perspective with cultural reciprocity requires an understanding of what is normal with a cultural basis for interpretation of the child's world. (Harry et al., 1999) Teachers' relationships with their students define literacy and determine the types of activities that occur in the classrooms of our K-12 schools. Therefore, pre-service teachers' attitudes about linguistic diversity are vitally important.

A strong foundation in linguistics and cultural diversity in teacher education is requisite for optimum classroom communication. (Moll, 1998) Inextricably connected to communication and learning, research into language attitudes of pre-service teachers addresses many of the current concerns of K-12 education. "Communication is a fundamental vehicle for realizing the full potential of humankind." (Wolfram, 1995) As such, pre-service teachers' attitudes about linguistic diversity are critical concerns. Appraisal of pre-service teachers' attitudes in these areas could illuminate curricular decisions and departmental planning for teacher education.

The aim of the study is to describe the status of pre-service teachers' attitudes about linguistic diversity and characteristics that contribute to the variation in language attitudes. A need exists to define and delineate what pre-service teachers actually think and believe about English and language in general. Examining pre-service teachers'

attitudes concerning linguistic diversity will illuminate the challenges, opportunities, and constraints of preparing future teachers to address student literacy development, language studies, Languages Other than English (LOTE) learning, and the development of cultural understanding. “Teachers play a critical role in helping students to realize a potentially powerful use of language, which is to engage the mind in thinking and learning with texts.” (Vacca & Vacca, 1993) Thus, a greater understanding of language attitudes has potential to enlighten teacher education. Pre-service teachers across the disciplines and through all grade levels could be targeted for learning experiences that would enhance their ability to teach diverse student populations.

A possible result of this research is an increased understanding of the need for pre-service teachers to obtain knowledge about language diversity and in turn inform curriculum development and instructional practices. Another possible outcome is the opportunity for teacher education to build language-related expertise based on knowledge of pre-service teachers’ attitudes toward language diversity. Additionally, knowledge of pre-service teachers’ attitudes toward language could show the need to increase awareness of language and literacy needs of all children, especially linguistic minorities. This knowledge could strengthen the link between language studies and teacher education curriculum.

Literacy development, certainly one of the major K-12 issues, could result through increasing pre-service teachers’ awareness of the nature of language and its development in children. Attitudes toward linguistic diversity could influence the capacity for efficient delivery of literacy education. Thus, awareness of future teachers’

attitudes has the potential to support teachers' early intervention in children's language and literacy development. Understanding of Languages other than English (LOTE) learning and cultural implications of LOTE in the community could mediate a potential linguistic and cultural discrepancy between teachers and students. A need for awareness and appreciation of ethnic group and national cultural heritage, as defined or characterized by diverse dialects and languages, could be identified. Finally, individual identity, as expressed through personal use of language, could be explicated through understanding of linguistic diversity and its ramifications in the classroom.

Definition Of Terms

Bilingual education:

Students are taught academic subjects in their native languages, while slowly and simultaneously adding English instruction.

Structured English Immersion:

Students are taught all subjects in English, with English used a large majority of the time and the native language only used when students have difficulty understanding something specific in English.

English as a Second Language (ESL):

Students are taught primarily in English, with specific instruction for English language acquisition. These programs can be self-contained or pull-out programs.

Language diversity:

Situation in K-12 schools where children enter with limited or no experience with the English language and many different languages are the first languages in their homes.

Language-minority:

Student who does not speak English as his or her first language and is not yet fluent in English.

Linguistic diversity:

Used synonymously with language diversity.

Linguistic-minority:

Used synonymously with language minority.

Limited English Proficient (LEP):

Used synonymously with Linguistic minority.

Pre-service teacher:

Student in a teacher education program of a university who has not yet received state certification to teach in K-12 schools.

Regular-service teacher:

K-12 classroom teacher who has completed requirements to be certified by the state of Texas.

Statement of the problem

An increasingly diverse K-12 student population requires a teaching force prepared to teach all children, including linguistic-minorities, effectively. In some instances the predominant attitudes of pre-service teachers are at odds with the learning

goals of the teacher education program. A need exists to define and delineate what pre-service teachers actually think and believe about English and language in general because attitudes toward linguistic diversity influence student learning. Attitudes drive paradigmatic behaviors; therefore knowledge of these attitudes can provide teacher education programs information that promotes the curricular and instructional paradigms espoused by the programs.

Purpose

The purpose of the study is to describe the status of pre-service teachers' attitudes toward language diversity and determine factors that account for variation in attitude toward language diversity. Understanding pre-service teachers' attitudes toward language and associated demographic and psychosocial variables will illuminate the challenges, opportunities, and constraints for preparing future teachers to address student literacy development, second language learning, language studies, Languages Other than English (LOTE) learning, and the development of cultural understanding. Teacher education has the formidable task to prepare the teachers of the future. "Quite simply, it is the responsibility of teacher educators to help all teachers, novice and experienced, acquire the knowledge, skills, attitudes, and dispositions needed to work effectively with a diverse student population." (Melnick & Zeichner, 1998, p. 88) As such, teacher education needs to be informed about the language attitudes of pre-service teachers in order to strengthen the link between language attitudes and teacher education curriculum planning and practice. Curricular decisions and pre-service teacher experiences could be

guided by knowledge of the current state of pre-service teachers' attitudes relevant to the student populations of the present and the future.

Research Questions

How do pre-service teachers rate on language attitudes concerning linguistic diversity?

Can the variance in language attitudes be explained by the gender of pre-service teachers?

Can the variance in language attitudes be explained by the age of pre-service teachers?

Can the variance in language attitudes be explained by the race and/or ethnicity of pre-service teachers?

Can the variance in language attitudes be explained by the certification sought by pre-service teachers?

Can the variance in language attitudes be explained by the regional identity of pre-service teachers?

Can the variance in language attitudes be explained by the political ideology of pre-service teachers?

Can the variance in language attitudes be explained by the trustfulness (psychological insecurity) of pre-service teachers?

Can the variance in language attitudes be explained by the helpfulness of pre-service teachers?

Can the variance in language attitudes be explained by the cognitive sophistication of pre-service teachers?

Significance Of Study

The study of pre-service teachers' attitudes toward linguistic diversity is important for several reasons. First, the dearth of research that relates directly to language attitudes of pre-service teachers indicates a need to contribute to a body of knowledge in this area. While there has been research into language attitudes from the perspective of other disciplines such as economics, psychology, and political science, an educational perspective with a goal of improving teacher education is lacking. Second, the field of education can benefit from this research because teacher education will operate from a knowledge base concerning how their pre-service teachers actually think and feel about language diversity when planning curriculum and learning experiences. Finally, educational policy at all levels will be informed by this study through an increased level of understanding of the linguistic and cultural challenges facing the education system. The timeliness of the study is supported by the demographic trend that sees a majority white student population changing to a majority of Hispanic, African-American, and other ethnic and/or racial groups. This shift in the make-up of the student population, coupled with a continued majority white teaching force, is very important because teachers' attitudes in the sociocultural context of the classroom influence student success.

Assumptions

Several assumptions concerning the instrumentation, the sample, and the importance of teacher attitude to student learning underlie this study. The Language Attitudes of Teachers Scale (LATS) (Byrnes and Kiger, 1994) was validated with a sample of teachers taking summer course work at universities in 3 states. Therefore, the population of the study was regular-service teachers, as opposed to the pre-service teachers who are the population of this study. Dennis Preston, Michigan State University professor of linguistics, said in a personal communication that, without specialized training in linguistics, teachers represent their communities. (Dennis Preston, personal communication, November 15, 1999) A number of studies have documented the misimpressions and negative attitudes held by members of linguistic communities toward diverse languages and dialects. (Byrnes et al., 1997) Thus, the assumption is that the instrument will be valid for pre-service teachers, who also represent the community.

Furthermore, support for the assumption that the instrument is valid for pre-service teachers comes from a study of teachers' and pre-service teachers' attitudes toward speakers of different dialects. (Kerr-Mattox, 1989) No significant difference was found between teachers' attitudes toward dialect diversity and pre-service teachers' attitudes toward dialect diversity.

Representativeness of the sample to the population of pre-service teachers is also assumed. The racial and ethnic make-up of the sample will be even more lacking in diversity than is found in the population of regular-service teachers. However, the sample will be representative of the population of the large, state university from which it comes.

(Naugher et al., 1999) As university communities are the source of the majority of teachers in the state of Texas, a sample that represents those who achieve teacher certification through teacher education programs of universities is assumed to be relevant to research of the topic.

Another assumption of this study is that teacher attitude is important to student learning. The State Board of Education of Texas has taken the position that ethnic diversity of the teaching force is related to learning outcomes. “Diversity within a school’s teaching force may increase knowledge and understanding of different groups for all the teachers, thereby enhancing the ability of all teachers to interact successfully in diverse classrooms.” (State Board of Education, 1994) Allusion to over-representation of Hispanic and African-American students in special education classes is said to be a result of the inability of teachers to relate to students because of linguistic and cultural differences. (State Board of Education, 1994) “To the extent that teachers’ attitudes can facilitate or be a barrier to learning English for LEP children, it is important to work toward constructive change.” (Byrnes & Kiger, 1994, p. 231) A 1972 study (Williams et al.) established a relationship between teacher expectancy and student performance. Therefore, the assumption is made that pre-teachers’ attitudes toward language diversity are relevant and will influence their future students’ learning.

Limitations And Delimitations

This study has limitations that restrict its generalizability. The sample has a preponderance of white females, ages 18 to 24. Overrepresentation of pre-service teachers who are from the suburbs of a large metropolitan area also exists. This is due to

the fact that these demographic characteristics typify the teacher education students of the College of Education of the large, state university from which the sample is derived. A justification for the use of the sample is that it reflects the general population of university teacher education pre-service teachers, both statewide and nationally.

Delimitations of the study are that it is cross-sectional, with a single set of administrations of the survey, and will be completed in the course of one semester. As the semester during which the study occurs is a representative semester with no significant differences in the enrollment trends, this methodology is efficient and allows for timely completion of the study. Further discussion of the limitations and delimitations of survey research will be addressed in the methodology section.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Just as the field of education is interdisciplinary in nature (Shulman, 1988), so too is the study of language attitudes and their relationship to sociocultural expressions and ethnic identifications. (Fishman, 1999) For example, language attitudes have been the focus of studies in the disciplines of history, economics, psychology, and political science, to name a few. Therefore, attitudes toward linguistic diversity will be examined from three perspectives: first, from the broad context of other disciplines; next, in relationship to learning and education; and, thirdly, through the lens of research. Finally, the role of language attitudes of pre-service teachers and their importance to teacher education will be explored.

Mainstream economics examines how people deal with resources and constraints on resources. Attitudes toward culture and language diversity are factors that affect allocation of resources; consequently, language attitudes are part of research in economics. The primary orientation of economic research on language attitude is as an explanatory factor of standard economic variables such as labor income. For example, linguistic diversity is often a factor in earnings differentials, as has been documented in studies of Francophones in Quebec and Hispanics in the United States. (Grin, 1999)

History has also developed a rich body of knowledge related to language attitudes. Language is one of the most obvious of the manifestations of a culture, and many of the historical conflicts in history have centered on language and ethnic identity. Although complex political, economic and social factors contributed to the conflict, the

1994-1996 war in Chechnya had at its core the preservation of the mother tongue of the Northern Caucasus. According to Human Rights Watch, a private political action group, as many as 100,000 people died as the result of this conflict, and 1999 saw a renewal of fighting with more loss of life a surety. (Human Rights Watch, 1999) The Chechnyan-Russian conflict illustrates ethnolinguistic importance in historical perspective and why historical research frequently targets language attitudes as central to understanding historical events. (Haarmann, 1999)

In fact, this study of pre-service teachers' attitudes toward linguistic diversity can be viewed from the perspective of historical research. Issues surrounding the education of immigrant, linguistic-minority students have been controversial throughout American history. Relevant to this study in particular is the history of Mexican American schooling in the southwestern part of the United States. Both California and Texas have a history of educational difficulty and conflict concerning educational equality. (San Miguel & Valencia, 1998) Scholars have studied the issues from a variety of perspectives, but recurring themes are the stigmatized Mexican American dialect and attempts to limit educational opportunities. These issues result from the LEP status of this group. San Miguel and Valencia (1998) conclude that insight into the educational history of Mexican Americans requires a historical perspective of the group as a culturally distinct group that came about as the result of conquest. Attitudes toward education of Mexican Americans reflect general attitudes toward linguistic diversity.

Psychology, and social psychology particularly, focus on attribution theory and its connection to language attitude. "Research shows that people generally form positive or

negative attributions about speakers who have accents and that these attributions are dependent on the person's attitudes toward the region, the country, or the language group to which the speaker is perceived to belong." (Padilla, 1999) Consequently, accents, or dialects, influence the attributions made by the listener toward the speaker; these attributions influence the interaction between the speaker and the listener.

Of specific interest to this study, social psychologists have identified the factors of psychological security and insecurity. These theories explain why and how different groups react to other groups based on the differential status of the respective groups. To illustrate, high-status Anglophones in Quebec are insecure toward Francophones because they are in a minority position. High-status groups in majority positions are more likely to have positive attitudes toward low-status groups. (Liebkind, 1999) Psychological insecurity is an independent variable of this study with a hypothesis that high levels of psychological insecurity will go hand-in-hand with negative attitudes toward language diversity.

Social psychologists have also researched ethnolinguistic strength and language attitude as it relates to dominant and subordinate language groups. Additionally, social psychology posits that the acquisition of a second language is a task requiring the adoption of the cultural perspective of the second language; "...however, this depends on the learner's attitude toward the second language in question." (Liebkind, 1999) These areas of research in the area of social psychology are relevant to this study and depict the interdisciplinary nature of language attitude.

Attitudes, expressed and conceptualized in language, are also important to the discipline of political science. Jean-Jacques Rousseau believed all laws were based on public opinion, which results from individual attitudes. (Brittanica, 1999) Jeremy Bentham thought a legislator's most important job was mediating the attitudes of the public with the mandates of the law. (Brittanica, 1999) Immanuel Kant's belief that the public was basically peace loving is the philosophical premise of the United Nations Educational, Scientific, and Cultural Organization (UNESCO). (Brittanica, 1999) Positive attitudes toward diverse cultures and languages are the foundation of this philosophy. Today, public opinion polling and public policy seem to be a two-way street, with each exerting influence on the other. Attitudes are important to public policy, and many of the issues of government relate to language attitudes and reluctant policies.

Linguistic identity is an important part of ethnic identity, and all states have problems with concerns of multilingualism. (Phillipson, 1999) Language policies, linguistic dominance, English-only issues, and English as a polycentric language, are a few areas of interest in the field of political science that can be illuminated by knowledge of language attitudes. To sum up, language attitudes are concerns of many disciplines; this study will place the role of language attitudes in the multidisciplinary field of education.

The fields of folk linguistics and sociolinguistics have contributed to knowledge about language attitudes as they relate to education. K-12 schools are part of communities and reflect community attitudes. Language details of a speech community of which non-linguists are aware depend more on sociocultural factors than on actual linguistic features

of a given language or dialect. Teachers who have not received specialized training in linguistics are like other members of their community and often have misunderstanding about linguistic diversity. Cross-cultural communication is enhanced by an awareness of language on the part of both teachers and their students. Inclusion in the curriculum and development of teaching strategies for learning about diverse languages and cultures promote accommodation and acceptance of language diversity in the classroom. (Tulasiewicz & Zajda, 1996)

Ethnic and linguistic stereotyping were noted in a Williams and Naremore (1974) study in which teachers rated children's speech and indicated academic expectations for the children based on their speech. Also, the Williams, Whitehead and Miller study (1972) found a connection between teacher attitudes toward language and academic expectations, with lower expectations of linguistic-minority children.

Sparapani, Abel, Easton, Edwards, and Herbster (1995) found that, as a group, 832 pre-service teachers from five different states "...preferred to teach in a school setting similar to that in which they grew up." (p. 21) This study used a survey instrument to measure pre-service teacher attitudes toward exceptionality and cultural diversity. Learning differences and cultural differences are considered as well as language differences because: "In addition to background differences, there may be language barriers to overcome, also." (Sparapani et al., 1995, p. 3) According to Sparapani et al. (1995), "Teacher educators and pre-service teachers alike are often resistant to exposure to information or experiences beyond that found in textbooks." The authors conclude that

this results in a lack of teacher involvement with ethnically diverse students. (Sparapani, 1995, p. 3)

Few contemporary studies have focused on language attitudes toward linguistic-minority children, although there is a body of research associated with African-American dialect and teacher attitude. Today's linguistic minority student is more likely to be from Asia or Latin America, instead of the European, Western immigrant of earlier immigration cycles. (Byrnes et al., 1997; Manning, 2000; Perkins, 2000) However, two relatively recent studies looked at language attitudes of teachers. First, a study of teachers of Vietnamese adult learners found that stereotypical attitudes were obvious in the selection of materials and instructional activities. (Kelly, 1988) Second, Clair (1995) did an ethnographic study of regular classroom teachers. She concluded that teachers' attitudes were erroneous and based on stereotypes and misinformation. However, both the Kelly (1988) and the Clair (1995) studies again focus on regular-service teachers. This study of language attitudes of pre-service teachers extends into new ground by surveying pre-service teachers.

Byrnes & Kiger (1994) and Byrnes et al. (1996; 1997) studied language attitudes of teachers toward language diversity. They surveyed 191 regular-service teachers from three states and used a principal components analysis to establish 3 factors: language politics, LEP intolerance, and language support. Internal consistency estimates of reliability yielded .81 for the scale. Straightforward question stems are evidence of face validity and construct validity received modest support with a -.62 correlation with a single item measure about having a LEP child in the classroom. First, Byrnes and Kiger

(1994) developed and validated a survey instrument, Language Attitudes of Teachers Scale (LATS). The results of this scale pointed to the complexity of language attitudes, and the role they play in teachers' expectations of their students. (Byrnes & Kiger, 1994) This study seeks to extend the use of LATS to pre-service teachers. To the extent that the attitudes will be correlated with demographic and psychosocial variables, teacher education can plan for experiences that will promote positive interaction between teachers and their linguistic-minority students.

Byrnes et al. (1996) used the LATS as the independent variable to explore relationships with psychological insecurity, political ideology, cognitive sophistication, and educational level. The sample for this study was 191 in-service teachers. These demographic and psychosocial constructs, with the exception of educational level, all proved to be significant in explaining the variations in teacher attitudes toward language diversity. This study will replicate the three significant variables with a sample of pre-service teachers to see if any one contributes significantly to variation in language attitudes of pre-service teachers.

The Byrnes and Kiger (1997) study looked at the score on the LATS in relation to experience with linguistic-minority children, formal training in second-language learning, region of the country, graduate education, and grade level taught. All of the variables were significantly related to positive attitudes toward language diversity, with the exception of grade level taught. Although grade level taught did not prove significant in the Byrnes and Kiger (1997) study, intended grade level to be taught was examined in this study. This variable looks for variation in attitudes on the part of pre-service teachers

based on content area orientation. Pre-service teachers in the sample could be seeking certification to teach elementary school, secondary school (English, history, algebra, etc.), or all-level certification areas (the arts, music, kinesiology, etc.).

This study looks at regionality, albeit in a different way than the Byrnes and Kiger study, by scaling regionality to depict status as indigenous or interloper and the influence of mobility since these are significant factors in linguistic choices. (Chambers, 1999) In addition, regionality was looked at from the point of view of urban, suburban, or rural designations. Finally, region was examined by asking subjects to specify a regional preference with “place as a personal construct” in mind. (Johnstone & Bean, 1999)

Although formal training in linguistics proved to be a significant factor in positive attitudes toward language diversity in the Byrnes and Kiger (1997) study, the Kerr-Mattox study (1989) did not find this to be the case. On the other hand, the Sparapani et al. (1996) study found formal training to be successful in helping pre-service teachers understand the issues associated with linguistic diversity. The pre-service teachers did show some positive gains in the middle of their teacher education programs. (Sparapani et al., 1996)

In conclusion, this study expands investigation of regular-teachers’ attitudes to pre-service teachers’ attitudes. By establishing relationships with mediating and psychosocial variables before teachers reach the K-12 classroom and while they are still in a teacher education program, action can be planned and taken to promote attitudes and behaviors that are consistent with good practices toward linguistic-minority students on the part of future teachers. The place this study occupies in the literature is as both an

expansion and a replication of previous studies using the LATS scale to examine language attitudes. (Byrnes & Kiger, 1994; Byrnes et al., 1996; 1997) studies. However, additional linguistic and demographic investigation adds to the overall goal of identifying relevant characteristics of pre-service teachers related to language diversity. The goal is to address the demographic reality of the population trends toward a majority of those previously classified as minorities.

CHAPTER 3

METHODS AND PROCEDURES

Research Design

This study used a survey design to quantify a description of the language attitudes of pre-service teachers and their relationships to specified demographic and psychosocial variables. Consistent with a positivist framework, a survey instrument was used to collect data. The advantages of survey design include economy, efficiency, and timeliness. Attributes of a population can be identified from a small sample set of persons. (Creswell, 1994)

The research hypothesis of the study is that at least one of the independent variables is contributing significantly to the variance in language attitudes. The multiple regression equation is:

$$Y_1 = \beta_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \text{Epsilon}_i$$

Where:

Y_1 = Language Attitudes of Teachers

β = intercept term

X_2 = gender

X_3 = age

X_4 = ethnicity

X_5 = certification sought

X_6 = regional identity

X_7 = trust

X_8 = political ideology

X_9 = cognitive sophistication

X_{10} = helpfulness

Epsilon_i = error term

Procedures

The survey was administered in a face-to-face collection of data and was cross-sectional. Respondents were asked to provide demographic information and to complete scales that measure attributes that are hypothesized to contribute to the variance of language attitudes of pre-service teachers. Elaboration of responses was not elicited, nor were clarifications or interpretations of items offered. This method of data collection involved minimal costs while providing efficient turn-around of data for completion of the study. Respondents completed a survey that includes demographic, mediating variables, scores on an attitude measuring scale, and scores on psychosocial measures.

Population and Sample

The population of this study was pre-service teachers, particularly those who are preparing to teach in Texas. The sample was purposive, drawing from students in required teacher education courses at a large, state university in a major metropolitan area. The sample was chosen in a single stage procedure. The sample contained 271 subjects.

Instrumentation

The Language Attitude of Teachers Scale (LATS) assessed attitudes toward linguistic diversity in the U.S. and limited-English-proficient students. There were 13

items coded from one (strongly disagree) to five (strongly agree). A higher score on the scale indicates a more negative attitude toward language differences. When this scale was developed and analyzed, the scale mean was 33.07 (SD = 7.6) and the range was 13-65. An alpha reliability coefficient of .81 was reported. The three factors that emerged from factor analysis were tentatively called language-politics, support for foreign-language learning, and intolerance of limited-English-proficient students factors. (Byrnes et al., 1996) "The three factors were statistically significantly correlated." (Byrnes et al., 455) Straightforward question stems are evidence of face validity. Construct validity was measured by correlation with a single item measure about having a LEP child in the classroom. The correlation was -.62, which was modest support for construct validity.

This study replicated some of the demographic and psychosocial variables used in a Brynes, Kiger, and Manning study (1996). Namely, in addition to the LATS scale (Brynes & Kiger, 1994), the psychological insecurity measure, political ideology measure, and the cognitive sophistication scale, which are from the National Opinion Research Center (NORC) (cited in Sullivan et al., 1982), were replicated.

The demographic variables of age and regionality were included with age operating as a continuous variable and regionality serving as a scaled independent variable. Linguistic dialectology has focused on region as a primary independent variable. Dialectology now looks at regionality in a sociolinguistic light, responsive to social changes. "Mobility has been a difficult factor to account for." (Chambers, 1999, p. 1) The Chambers Regionality Index (RI) (1999) seeks to quantify effects of mobility by scaling factors associated with region as an independent variable. Empirical evidence has

been established for inferring the sociolinguistic effects of regionality on linguistic choices (Chambers, 1999). Based on information provided about the birthplace of the respondents and their parents, current place of residence, and place of residence during the K-12 school years, respondents were rated on a 7-point scale from indigenous to interloper. No hypothesis was made as to the relationship or direction of the relationship of mobility and regionality in terms of indigenous or interloper status to language attitude.

Thus, the scaled independent variable, regionality, was based on coding information elicited on the questionnaire concerning where the respondent was born, raised, currently lives, birthplace of parents, and self-identification of urbanicity and idea of home. Table 1 displays the criteria for determining the values for the regionality variable.

Table 1

Regionality

Status	RI	Profile
Indigenous	1	Born, raised, and living in same place as parents
↑	2	Born, raised, living in region, parents born in state
	3	Born, raised living in region, parents born out of state
	4	Raised and living in region, but born elsewhere in state
	5	Raised and living in region, but born outside of state
↓	6	Living in region, but born and raised elsewhere in state
Interloper	7	Living in region, but born and raised outside of state

Based on Barbara Johnstone and Judith Mattson Bean's presentation (1999), Spaces and Places in Linguistic Research: Linguistic Variation and Humanistic Geography, "place as location, place as meaning" was assessed by asking respondents what they considered "home." Responses were categorized as (1) region, referring to the local region from which the sample comes, (2) state, the state of Texas, (3) other state or country, or (4) personal construct, responses that identified place as a personal meaning, not a location. Examples of responses that received the "4" classification are: "Wherever my family is;" "Wherever I live;" or "Where I'm comfortable in every way." Table 2 indicates the scoring for alternative measures of regional identity.

Finally, region was considered based in self-declared urbanicity. Students were asked to choose a designation of urban (1), suburban (2), or rural (3) to describe themselves.

Table 2

What do you consider home = Constructing Regional Identity

1 = Region	2 = State
3 = Other State/Region	4 = Personal Construct

Age was considered as a contributor to variance in language attitude in order to differentiate between traditional age college students and returning adult students who would presumably have more experience with diverse cultures and language. (Byrnes et al., 1994) The helpfulness variable was an additional measure based on an item from the

General Social Survey (GSS) developed by the NORC (1990). The hypothesis was that people with a more helpful attitude would have a more positive attitude toward diversity.

Education level was not included in the model because all of the respondents were college students in a teacher education preparation program. A very few respondents could be post-baccalaureate students seeking teaching certification. Older students, beyond the expected 20 to 23 year-olds, could be returning adult students or post-baccalaureate students, but due to the very small number of post-baccalaureate students, this differentiation was not included in the study. An example of the survey instrument and cover letters can be found in Appendices A, B, and C. Table 3 shows all the variables measured on the survey and included in the regression model. This table not only lists the research questions, but also designates each question's role in the model. In addition, Table 3 displays the survey item that addresses each question.

Table 3
Variables, Questions, Survey Items

Variable Name	Research Questions	Item on Survey
Independent Variable 1 LATS Score	How do pre-service teachers rate on language attitudes concerning linguistic diversity?	VIII. Language Attitudes of Teachers Scale
Dependent Mediating Variable 1 Gender	Can the variance in language attitudes be explained by the gender of pre-service teachers?	I. Demographic Information
Dependent Mediating Variable 2 Age	Can the variance in language attitudes be explained by the age of pre-service teachers?	I. Demographic Information
Dependent Mediating Variable 3 Ethnicity	Can the variance in language attitudes be explained by the race and/or ethnicity of pre-service teachers?	II. Race/Ethnicity

Variable Name	Research Questions	Item on Survey
Dependent Mediating Variable 4 Certification Sought	Can the variance in language attitudes be explained by the certification sought by pre-service teachers?	III. Teacher Certification Sought
Dependent Mediating Variable 5 Regional Identity	Can the variance in language attitudes be explained by the regional identity of pre-service teachers?	V. Regionality
Dependent Variable 1 Trust	Can the variance in language attitudes be explained by the trustfulness (psychological insecurity) of pre-service teachers?	VI. Trust
Dependent Variable 2 Political Ideology	Can the variance in language attitudes be explained by the political ideology of pre-service teachers?	IV. Politics
Dependent Variable 3 Cognitive Sophistication	Can the variance in language attitudes be explained by the cognitive sophistication of pre-service teachers?	IX. Wordsum
Dependent Variable 4 Helpfulness	Can the variance in language attitudes be explained by the helpfulness of pre-service teachers?	VII. Help

Data Analysis

First, information about respondents and non-respondents of the survey was reported. However, response bias was not expected to be a significant factor because the face-to-face administration of the survey minimized non-respondents.

Next, descriptive statistics were generated for variables in the analyses. Means, standard deviations, and range of scores for all variables were reported. Then a zero order correlation matrix was generated, and multiple regression techniques were conducted based on the multiple regression model for the LATS scale with the independent variables. The goal of these techniques was to examine comparative influences of social psychological and mediating demographic variables on language attitudes of pre-service teachers. The research questions were answered based on an analysis of the multiple regression equation:

$$Y_i = \beta_1 + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + \beta_5 X_{i5} + \beta_6 X_{i6} + \beta_7 X_{i7} + \beta_8 X_{i8} + \beta_9 X_{i9} + \beta_{10} X_{i10} + \epsilon_i$$

These statistics were used because they effectively reflected the unit of measurement of the scales on the survey, and they provided a report of the relationship between the variables of the study (Hinkle et al., 1994).

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

Presentation of Data

Throughout the month of January and early February 2000, 271 pre-service teachers enrolled in required education courses at a major, public university in a large metropolitan area in Texas completed surveys designed to elicit the status of pre-service teachers' attitudes toward language diversity and related characteristics. A cover letter explained that responses were voluntary, confidential, and anonymous. Subjects were assured that their responses would not affect their standing in the College of Education. Face-to-face administration of the survey minimized response bias. Of the 271 students, all agreed to complete the questionnaire. As a result of the use of a statistical outlier procedure, nine of the questionnaires were removed from the sample. Some of the surveys had missing data. Two respondents did not state their ages. Four subjects did not designate a political belief. There was one non-respondent for the variable of regionality in terms of urban, suburban, or rural designations. One missing data point of the LATS scores resulted from lack of responses by one respondent. Of the 10 items on the cognitive sophistication measure, eight of the items had one missing value.

This chapter presents data regarding the respondents and the characteristics that account for variation in attitude toward language diversity. The multiple regression model of the study proposed that at least one of the independent variables contributed significantly to the variation found amongst the pre-service teachers in the sample. Prior to discussing the outcome of the regression procedure, descriptive statistics are displayed.

Ten independent variables were included and the regression procedure was conducted on a model with the independent variable, the LATS score. Gender was assessed as a contributor to variation. As typifies the teaching profession, Female respondents ($n=207$, 79%) dominated the sample. Fifty-five respondents were male for a total of 21%. Also mirroring the teaching force, white subjects comprised 80.9% of the sample ($n= 212$). Sixteen subjects were African-American (6.1%). Hispanic subjects numbered 22 for a total of 8.4%, and the remaining subjects fell into the “other” group that included Asian, Pacific Islander, Native American, and other category ($n=12$, 4.6%).

At the university from which the sample was drawn, students can seek teacher certification at three levels: elementary, secondary, and all level. Those seeking elementary certification comprised the largest group numbering 127, or 48.5%. Secondary pre-service teachers accounted for 29% ($n=76$), and the remaining 22.5% ($n=59$) subjects sought all-level certification.

Political ideology was measured based on a scale of one to five, where subjects identified themselves as extremely liberal (1), liberal (2), moderate (3), conservative (4), or extremely conservative (5). A moderate self-designation was most common ($n=119$, 46.1%). The next largest group was conservative ($n=88$, 34.1%). Forty-four respondents labeled themselves liberal (17.1 %). The extremes in the scale range had low frequencies with three respondents classifying themselves as extremely liberal (1.2%) and four respondents choosing extremely conservative (1.6%).

The range of ages in the sample was 16 to 51. This variable was addressed as a continuous variable to look for contribution to variance in language attitude related to age

of the respondent. Over 60% of the sample fell in the age range of 20 to 23, which is expected for junior or senior teacher education students. Five subjects were 19 and one subject was 16. Although 36.5% of the sample was 24 to 51, 87.7% of this group was under 30. Ten students were over 40 years old (3.1%).

Regionality was measured in three different ways. First, a scale from one to seven was used to designate the subjects' status in terms of indigenous to interloper status (see Table 1). The designations were based on information gathered concerning birthplace, childhood home, parents' regional origins and current residence, and respondents' current residence (see Appendix A). The most indigenous respondents received a score of one and higher numbers designated a relatively greater interloper status due to greater mobility in residence. Second, subjects were asked to state what they considered home. Their responses were coded one to four based on their response. Code one was a response that indicated home was a place in the local region from which the sample was drawn. A score code of two was a response that was a place within, or was, the state of Texas, but not in the local region. Three designated a score code that was any place outside the state of Texas. A score of four was a response that was a construct or an idea (e.g., "home is where I feel comfortable in every way."), but not a specific place. Finally, subjects were asked to rate themselves as urban (1), suburban (2), or rural (3).

Only 10.7% of the respondents were born, raised, and had parents from the local region. However, 35.5% were born in the region, but they had parents who were from elsewhere in the state or out of state. Forty percent were born and raised either outside of the region (20.2%) or outside of the state (19.8%). Over half (51.5%) of the subjects

designated the region as their home. An additional 23.1% chose Texas as their home. Respondents who designated another state or country as their home numbered 12.6%. The response of 13% of the sample was not a geographical place, but rather, an idea or “place as meaning.”

Psychological insecurity was measured by the sum of the scale scores of three “trust in people” questions from the General Social Survey of the NORC. The lowest score possible was a three, indicating a very low level of trust in people. The highest possible score was a 12, indicating a very high level of trust in people. The first statement was, “If you don’t watch out, people will take advantage of you.” The second statement was, “If a person doesn’t look out for him/herself, nobody else will.” The third statement was, “Life is basically a struggle for survival.” Respondents chose (1) strongly agree, (2) agree, (3) disagree, or (4) strongly disagree. A large majority of respondents had total scores of six through nine (90.9%). One subject scored 3, the lowest sum possible, which is the highest level of psychological insecurity. Two subjects scored a 12, which is the lowest level of psychological insecurity and thus the highest level of trust in people.

The helpfulness variable was measured by the score of a response by the subject to a statement, “Would you say that most of the time people try to be helpful, or that they are mostly just looking out for themselves?” Their choice of responses was (1) try to be helpful, (2) just look out for themselves, or (3) don’t know. Fifty-six and one tenth percent of the respondents ($n=147$) selected choice one. Eighty subjects chose choice two, and the 35 remaining subjects chose choice three.

A summative score on the Wordsum vocabulary test from the GSS and NORC measured cognitive sophistication. Students were asked to choose a definition for 10 words; each word had five possible responses. By agreement with NORC, the actual items are not published; however, the summative scores of correct responses by the subjects are reported and range from one correct to all 10 correct. Seventy-seven of the subjects scored seven correct. The next largest group was six correct responses ($n=60$). Students scoring eight correct responses followed closely ($n=56$). Five and nine correct responses were $n=23$ and $n=24$, respectively. Twelve people scored four or less correct, and nine people had all 10 correct.

Finally, the LATTS score, which served as the dependent variable for the study, was a summative score on a scale of 13 statements that were rated on a Likert-type scale of one to five (1. Strongly disagree, 2. Disagree, 3. Uncertain, 4. Agree, 5. Strongly agree). The highest possible score was a 65. This represents a highly intolerant attitude toward linguistic diversity. The lowest possible score was a 13, representing a highly tolerant attitude toward language diversity. The items were as follows:

1. To be considered American, one should speak English.
2. I would support the government spending additional money to provide better programs for linguistic-minority students in public schools.^a
3. Parents of non- or limited-English-proficient students should be counseled to speak English with their children whenever possible.
4. It is important that people in the U.S. learn a language in addition to English.^a

5. It is unreasonable to expect a regular-classroom teacher to teach a child who does not speak English.
6. The rapid learning of English should be a priority for non-English-proficient or limited-English-proficient students even if it means they lose the ability to speak their native tongue.
7. Local and state governments should require that all government business (including voting) be conducted only in English.
8. Having a non- or limited-English-proficient student in the classroom is detrimental to the learning of the other students.
9. Regular-classroom teachers should be required to receive pre-service or in-service training to be prepared to meet the needs of linguistic minorities.^a
10. Most non- and limited-English-proficient children are not motivated to learn English.
11. At school, the learning of the English language by non- or limited-English-proficient children should take precedence over learning subject matter.
12. English should be the official language of the United States.
13. Non- and limited-English-proficient students often use unjustified claims of discrimination as an excuse for not doing well in school.

^aItems two, four, and nine were reverse coded.

Scores of the sample ranged from 17 to 53. Almost 50% of the scores were 34 or less, with the most frequent score being 34 ($n = 24$, 49.4%). Ten people scored 25 or less. Ninety-five respondents (28%) scored 26 through 33. At the high end of the composite

scores, nine people scored 48 or higher. Close to half ($n=123$, 47.2%) scored between 35 and 47.

Descriptive statistics for variables in the analyses are displayed in Table 4. Means, standard deviations, and range of scores for all variables were reported. This table gives truncated descriptions of the values of the range in the last column.

Table 4
Descriptive Statistics

Variable	Mean	Std. Deviation	Range
Gender	.7901	.4080	Male=0 Female=1
Age	24.5038	5.6647	16-51
Race/Ethnicity	1.3664	.8231	1-4 White, African-Am., Hisp., Other
Teacher Certification	1.7405	.8031	1=el. 2=sec. 3=all-lev.
Politics	3.1783	.7685	1-5, Very liberal-Very Conservative
Regionality (Scaled)	4.5344	1.9780	1-7 (scaled)
Regionality (Self-designation)	1.8702	1.0714	1-4, 1=metro, 2= TX, 3=oth., 4=per.
Regionality (Urban/Suburban/Rural)	1.9538	.5608	1-3, 1=urb., 2=suburb., 3=rur.
Viewpoint	7.4542	1.3518	3-12, 3=not trust, 12=high trust
Helpfulness	1.5725	.7169	1-3, 1= helpful, not helpful
LATS Total	35.2414	6.2646	17-53, 13=very pos., 65=very neg.
Cognitive Sophistication Total	6.9119	1.5076	0-10, 0=low-10 high

An outlier detection procedure was conducted. Nine cases were removed from the regression procedure because their LATS scores were two or more standard deviations from the mean as shown by casewise diagnostics. Table 5 depicts the casewise diagnostics, displaying case number with standard residual, LATS total score, and predicted residual listed.

Table 5

Outlier Procedure

Case Number	Std. Residual	LATS total	Predicted Value	Residual
109	-2.059	28.00	39.7785	-11.7785
113	-2.522	17.00	31.4290	-14.4290
125	2.338	52.00	38.6258	13.3742
147	3.238	53.00	34.4721	18.5279
151	-2.584	20.00	34.7835	-14.7835
157	-2.100	30.00	42.0162	-12.0162
159	-2.768	18.00	33.8352	-15.8352
199	-2.444	26.00	39.9828	-13.9828
201	2.389	47.00	33.3339	13.6661

Table 6 displays frequencies and percents for gender, race/ethnicity, teacher certification sought, and political ideology.

Table 6

Frequencies (Gender, Race/ethnicity, Teacher
Certification Sought, Political Ideology)

Gender	Male=55, 21%	Female=207, 79%		
Race/Ethnicity	White/not Hispanic=212, 80.9%	African- American=16, 6.1%	Hispanic=22, 8.4%	Other=12 4.6%
Teacher Certification Sought	Elementary 127 48.5%	Secondary 76 29%	All-level 59 22.5%	
Politics	Frequency	Percent	Valid Percent	Cumulative %
Extremely Liberal	3	1.1	1.2	1.2
Liberal	44	16.8	17.1	18.2
Moderate	119	45.4	46.1	64.3
Conservative	88	33.6	34.1	98.4
Extremely Conservative	4	1.5	1.6	100.0
Missing	4	1.5		100.0

Age was measured as a continuous variable with a range of ages 16 to 51;
however, over 60 % were traditional college junior or senior ages of 20, 21, 22, or 23.

Table 7 illustrates the frequencies and percents.

Table 7

Frequencies (Age)

Age	Frequency	Percent	Valid Percent	Cumulative %
16.00	1	.4	.4	.4
19.00	5	1.9	1.9	2.3
20.00	18	6.9	6.9	9.2
21.00	47	17.9	18.1	27.3
22.00	63	24.0	24.2	51.5
23.00	31	11.8	11.9	63.5
24.00	14	5.3	5.4	68.8
25.00	19	7.3	7.3	76.2
26.00	9	3.4	3.5	79.6
27.00	12	4.6	4.6	84.2
28.00	6	2.3	2.3	86.5
29.00	3	1.1	1.2	87.7
30.00	3	1.1	1.2	88.8
31.00	4	1.5	1.5	90.4
32.00	6	2.3	2.3	92.7
33.00	1	.4	.4	93.1
35.00	2	.8	.8	93.8
36.00	1	.4	.4	94.2
37.00	1	.4	.4	94.6
38.00	3	1.1	1.1	95.8
39.00	1	.4	.2	96.2
41.00	2	.8	.8	96.9
44.00	2	.8	.8	97.7
45.00	2	.8	.8	98.5
47.00	2	.8	.8	99.2
50.00	1	.4	.4	99.6
51.00	1	.4	.4	100.00
Total	260	99.2		
Missing	2	.8		
Total	262	100.0		

Table 8 shows the frequencies and percents of the regionality scale related to indigenous/interloper status. Regionality was addressed in two additional ways beyond indigenous/interloper status: self-identifications of constructing regional identity and urban, suburban, or rural. Constructing regional identity, or regionality in terms of the

respondents' idea of place, is displayed in Table 9. Finally, regionality was considered from the standpoint of urbanicity versus rurality. Subjects were asked to self-identify themselves as rural, suburban, or urban. Table 10 shows the of urban/suburban/rural self-designations.

Table 8

Frequencies (Regionality)

	Frequency	Percent	Valid Percent	Cumulative %
1=Indigenous	28	10.7	10.7	10.7
2	18	6.9	6.9	17.6
3	47	17.9	17.9	35.5
4	19	7.3	7.3	42.7
5	45	17.2	17.2	59.9
6	53	20.2	20.2	80.2
7=Interloper	52	19.8	19.8	100
Total	100			100

Table 9

Frequencies (Constructing Regional Identity)

	Frequency	Percent	Valid Percent	Cumulative %
Regional	135	51.5	51.5	51.5
State	60	22.9	22.9	74.4
Other State/Country	33	12.6	12.6	87
Personal Construct	34	13	13	100
Total	262	100		100

Table 10

Frequencies (Urban/Suburban/Rural)

	Frequency	Percent	Valid Percent	Cumulative%
Urban	47	17.9	18	18.4
Suburban	178	67.9	68.2	86.6
Rural	35	13.4	13.4	99.6
Missing Total	1	.4	.4	100
Total	262			100

The independent variable, viewpoint or psychological insecurity, was based on the summative scores on the three trust in people items from the General Social Survey. Frequencies of responses follow in Table 11.

Table 11
Frequencies (Psychological Insecurity)

Summative Score	Frequency	Percent	Percent Valid	Cumulative %
3	1	.4	.4	.4
4	5	1.9	1.9	2.3
5	9	3.4	3.4	5.7
6	44	16.8	16.8	22.5
7	73	27.9	27.9	50.4
8	76	29	29	79.4
9	45	17.2	17.2	96.6
10	4	1.5	1.5	98.1
11	3	1.1	1.1	99.2
12	2	.8	.8	100
Total	262			100

Frequencies for the Helpful variable are displayed in Table 12. The scores are based on a response to a single item measuring the respondents' attitudes toward the helpfulness of other people. The three choices are stated in the table, and then frequencies and percents are noted.

Table 12
Frequencies (Helpful)

	Frequency	Percent	Valid Percent	Cumulative %
1=try to be helpful	147	56.1	56.1	56.1
2=Just look out for themselves	80	30.5	30.5	86.6
3=Don't know	35	13.4	13.4	100
Total	262			100

Previous research suggests that education level has a positive effect on language attitude. Due to the fact the all of the subjects in the sample are college students with

similar levels of education, a measure of cognitive sophistication was employed to differentiate between the subjects in the sample and find a source of variation in attitude.

Table 13 shows the frequency and percents for this scale.

Table 13

Frequencies (Cognitive Sophistication)

Summative Score	Frequency	Percent	Valid Percent	Cumulative %
3	1	.4	.4	.4
4	5	1.9	1.9	2.3
5	9	3.4	3.4	5.7
6	44	16.8	16.8	22.5
7	73	27.9	27.9	50.4
8	76	29	29	79.4
9	45	17.2	17.2	96.6
10	4	1.5	1.5	98.1
11	3	1.1	1.1	99.2
12	2	.8	.8	100
Total	262		100	100

Finally, frequencies and percents are shown for the LATS total score in Table 14.

This is a summative score based on the choices respondents made on the 13-item instrument.

Table 14

Frequencies (LATS Total Score)

Summative Score	Frequency	Percent	Valid Percent	Cumulative %
17	1	.4	.4	.4
18	1	.4	.4	.8
20	1	.4	.4	1.1
21	2	.8	.8	1.9
22	1	.4	.4	2.3
23	1	.4	.4	2.7
24	2	.8	.8	3.4
25	1	.4	.4	3.8
26	5	1.9	1.9	5.7
27	9	3.4	3.4	9.2
28	6	2.3	2.3	11.5
29	10	3.8	3.8	15.3
30	17	6.5	6.5	21.8
31	14	5.3	5.4	27.2

Summative Score	Frequency	Percent	Valid Percent	Cumulative %
32	15	5.7	5.7	33
33	19	7.3	7.3	40.2
34	24	9.2	9.2	49.4
35	13	5.0	5.0	54.4
36	17	6.5	6.5	60.9
37	18	6.9	6.9	67.8
38	13	5.0	5.0	72.8
39	11	4.2	4.2	77
40	9	3.4	3.4	80.5
41	9	3.4	3.4	83.9
42	14	5.3	5.4	89.3
43	3	1.1	1.1	90.4
44	5	1.9	1.9	92.3
45	4	1.5	1.5	93.9
46	2	.8	.8	94.6
46	2	.8	.8	94.6
47	5	1.9	1.9	96.6
48	2	.8	.8	97.3
50	3	1.1	1.1	98.5
52	2	.8	.8	99.2
53	2	.8	.8	100
Total	261		99.6	100
Missing	1.4		100	100
Total	262			100

Table 15 shows zero-order correlation coefficients measuring the association between LATS and variables addressed in the study. Although there are some correlations between the independent variables, they are not high enough to suggest a problem with multicollinearity. The highest correlation is between gender and teacher certification sought (Pearson Correlation Significance = $-.354^*$, $p < .001$). This shows that more females seek elementary certification. All other correlations are less than .3 on the Pearson Correlation Procedure (Two-tailed). Respondents who were not classified as white in the race/ethnicity scales correlated negatively with the Wordsum (cognitive sophistication) scale. LATS correlates significantly with gender, race/ethnicity, political ideology, psychological insecurity, and cognitive sophistication.

Table 15
Correlation Matrix (Pearson Correlation, Significance)

*Significant Correlations

	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	1.000											
2. Age	-.035 .569	1.000										
3. Race/Ethnicity	-.021 .734	-.091 .144	1.000									
4. Certification	-.354* .000	-.216* .000	.092 .132	1.000								
5. Politics	.018 .772	.009 .887	-.096 .126	-.029 .648	1.000							
6. Regionality	-.069 .263	.147* .018	.075 .229	.039 .525	.021 .738	1.000						
7. Construct Regionality	.025 .686	.016 .794	.132* .032	-.021 .729	-.043 .492	.271* .000	1.000					
8. Urban/Suburban/Rural	-.093 .134	.156* .012	-.202* .001	.017 .788	.075 .233	.086 .169	.125* .044	1.000				
9. Psychological Insecurity	.076 .219	-.007 .912	-.081 .190	-.067 .277	.066 .294	.021 .739	.054 .383	.079 .204	1.000			
10. Helpful	-.138* .026	-.123* .047	.130* .035	.093 .134	-.135 .030	.073 .242	.042 .496	-.001 .991	-.159* .010	1.000		
11. Wordsum (Cognitive Sophistication)	-.099 .111	.153* .014	-.289* .000	.134* .031	-.045 .472	.116 .061	-.024 .705	.086 .168	.108 .081	-.018 .775	1.000	
12. LATS	-.204* .001	-.015 .806	-.234* .000	.189* .002	.166* .008	-.044 .475	-.072 .247	.076 .225	-.144* .020	.014 .817	-.131* .035	1.000

Multiple regression techniques were conducted based on the multiple regression model for the LATS scale with the independent variables. The goal of these techniques was to examine comparative influences of social psychological and mediating demographic variables on language attitudes of pre-service teachers. Table 16 shows the model summary:

$$Y_1 = \beta_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \text{Epsilon}_i$$

Table 16

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.480 ^a	.231	.195	5.6639

a. Predictors: (Constant), Voc. Test Total, Politics, Constructing Regional Identity, Gender, Age, Viewpoint Total, Urban/suburban/rural, Help, Regionality, Race/Ethnicity, Teacher Certification Sought

This model explains 23.1% of the variance toward linguistic diversity on the part of pre-service teachers. The hypothesis of the study was that at least one of the independent variables contributed significantly to the variation. An analysis of variance procedure (ANOVA) was conducted to test the hypothesis. Table 17 displays the output of the ANOVA procedure. Table 18 reports the coefficients for the Model, identifying the five variables that contributed to the variance in language diversity attitude and their relative weights of contribution.

Table 17

ANOVA^b

Model	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance
1 Regression	2165.864	11	196.906	6.015	.000 ^a
Residual	8020.043	245	32.735		
Total	10186.008	256			

a. Predictors: (Constant), Voc. Test Total, Politics, Constructing Regional Identity, Gender, Age, Viewpoint Total, Urban/suburban/rural, Help, Regionality, Race/Ethnicity, Teacher Certification Sought

b. Dependent Variable: LATS TOTAL SCORE

A Table 18 shows the coefficients (beta weights and standard error terms), standardized coefficients, t-scores and significance by variables regressed on the LATS total score.

Table 18

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error			
1					
Constant	43.899	4.166		10.539	.000
Wordsum	-1.026	.263	-.238	-3.899	.000
Politics	1.201	.474	.146	2.531	.012
Construct Region	-.166	.350	-.028	-.475	.635
Gender	-2.075	.956	-.134	-2.171	.031
Age	5.105E-02	.068	.046	.754	.451
Psych. Insecurity	-.587	.274	-.125	-2.144	.033
Urban/Suburban/Rural	8.288E-02	.675	.007	.123	.902
Helpfulness	.293	.524	.033	.559	.577
Regionality	-9.114E-02	.193	-.028	-.472	.637
Race/ethnicity	-2.539	.488	-.319	-5.209	.000
Teacher Certification	1.707	.504	.217	3.384	.001

These statistics were used because they effectively reflected the unit of measurement of the scales on the survey, and they provided a report of the relationship between the variables of the study (Hinkle et al., 1994).

Analysis

The hypothesis of the study is that at least one of the independent variables of the multiple regression model contributes significantly to the variance found amongst pre-service teachers' attitudes to linguistic diversity. The hypothesis has been supported by an ANOVA at a highly significant level ($p < .000$). Correlations that show associations between the independent variable LATS and three mediating variables (i.e., gender, teacher certification sought, and race/ethnicity) as well as three psychosocial variables (i.e., psychological insecurity, cognitive sophistication, and political ideology) are displayed in Table 18. All of these correlations appear to be generalizable to a population of pre-service teachers, particularly those in teacher education programs and preparing to teach in Texas.

An analysis of the research questions put the variables in perspective as far as their contribution to the variation that is found in attitudes toward linguistic diversity. Each question can be analyzed for contribution to variation, relative weight of the contribution, and correlational aspects. The following sections include narrative accounts of the findings and synthesize them in relation to each question.

How Do Pre-Service Teachers Rate On Language Attitudes Concerning Linguistic Diversity?

The sample had a mean score on the LATS of 35.2414 with one missing data point ($N=261$). The standard deviation was 6.2646. Consistent with the LATS developed by Byrnes and Kiger (1994), three components emerged from a Principal Component Analysis: Language Politics, Language Support, and Intolerance toward LEP. The possible range of the scale is 13 at the lowest, which would indicate a highly tolerant attitude toward linguistic diversity. Conversely, the highest possible score is a 65, which would indicate a highly intolerant attitude. The actual score range was 17 to 53.

Can The Variance In Language Attitudes Be Explained By The Gender Of Pre-Service Teachers?

Gender contributed to the variance in attitude toward language diversity ($p=.031$). Female respondents had lower LATS scores indicating a more positive attitude.

Can The Variance In Language Attitudes Be Explained By the Age of Pre-Service Teachers?

Age was not a significant contributor to the model; thus age cannot be said to contribute significantly to the variation in language attitudes of pre-service teachers.

Can The Variance In Language Attitudes Be Explained By The Race And/Or Ethnicity Of Pre-Service Teachers?

Race/ethnicity did contribute to the variation found in language attitude ($p=.000$). The scale scored white participants were coded as one, African Americans as two, Hispanics as three, and Other as four. With each increase of one point in the race/ethnicity scale, there was a corresponding reduction in the LATS score of -2.539 .

Therefore, the lower LATS showed a relatively more positive attitude toward language diversity.

A correlation to be noted is between race/ethnicity and cognitive sophistication (Wordsum). The measurement scale is based on a 10-word vocabulary test that is designed to show integrative thinking and complex reasoning. However, cultural and second language issues may affect performance on the scale.

Can The Variance In Language Attitudes Be Explained By The Certification Sought By Pre-Service Teachers?

Variation was explained by the level of certification sought by the pre-service teachers in the sample ($p=.001$). Contrary to a previous study that showed no significance in grade level taught for language diversity attitude, the planned level of teaching predicted variation. As the scale score for certification went up (1=elementary, 2=secondary, 3=all-level), the LATS score went down. This finding indicates that those who plan to teach lower grades have a more positive attitude to language diversity.

Can The Variance In Language Attitudes Be Explained By The Regional Identity Of Pre-Service Teachers?

None of the three ways that regionality was assessed resulted in statistically significant findings for contribution to the variation found in attitude toward linguistic diversity. A different research design could be used to examine this area, particularly as it relates to local identification and socially constructed ideas of places. Social theory, linguistic dialectology, and humanistic geography have methodologies that could investigate this element. (Johnstone & Bean, 1999)

Can The Variance In Language Attitudes Be Explained By The Political Ideology Of Pre-Service Teachers?

The findings concerning political ideology predict that as the political rating goes up the LATS score goes up ($p=.012$). In other words, as the self-rating became more conservative, there was less tolerance for language diversity.

Can The Variance In Language Attitudes Be Explained By The Trustfulness (Psychological Insecurity) Of Pre-Service Teachers?

Psychological insecurity did predict variation in language attitude ($p=.033$). As psychological insecurity went down, indicating more insecurity, LATS scores went up, indicating less tolerance for language diversity.

Can The Variance In Language Attitudes Be Explained By The Helpfulness Attitude Of Pre-Service Teachers?

Attitude toward the helpfulness of others did not predict tolerance of diversity. The way the responses were scaled confounded the findings because more trustfulness was indicated by a choice of three (not sure) than a choice of two (just look out for themselves). However, when these codes were reversed and assessed again using multiple regression, no significance was found.

Can The Variance In Language Attitudes Be Explained By The Cognitive Sophistication Of Pre-Service Teachers?

The findings concerning cognitive sophistication, as measured by the Wordsum vocabulary test were predictive of language attitude ($p=.000$). A higher score on this

scale predicted a lower score on the LATS. Thus, respondents who were more cognitively sophisticated were also more tolerant of language diversity.

In conclusion, findings of the study indicate significant correlations between LATS and gender, teacher certification sought, and race/ethnicity. In addition, the psychosocial correlates of political ideology, psychological insecurity, and cognitive sophistication to LATS are statistically significant.

CHAPTER 5

SUMMARY AND CONCLUSIONS

Summary

The LATS measurement that served as the dependent variable of this study was chosen because it provided a benchmark by which other demographic and psychosocial variables could be assessed for impact on language attitude. The goal of the study was to find out what contributed to the variation found amongst pre-service teachers toward language diversity and linguistic minority children. The primary charge of the study was to come up with descriptive demographic and psychosocial correlates that predict variation and the direction of the variation since language attitudes can affect student learning. First, language attitudes are important because they influence teachers' attitudes toward their students, and this in turn can influence their expectations of the students. Perceptions about students, and resultant expectations, positively or negatively impact student learning. Second, knowledge about what shapes teachers' language attitudes can guide teacher education in targeting appropriate areas that will improve teacher preparation. The variables considered for contribution to variance in language attitude were gender, age, race/ethnicity, teacher certification sought, political ideology, regionality, psychological insecurity, attitude toward helpfulness, and cognitive sophistication.

Collection of data took place in January and early February of 2000 and included 271 pre-service teachers in required teacher education classes at a large state university in a major metropolitan area in Texas. The researcher personally went to the classes to

distribute the surveys. Respondents completed them at that time and the researcher collected them. Students were assured of confidentiality and anonymity. The data was analyzed using statistical procedures, and relevant demographic and psychosocial correlates were identified. Three of the mediating variables were significant: gender, race/ethnicity, and teacher certification sought. Also, three of the psychosocial variables were statistically significant: political ideology, psychological insecurity, and cognitive sophistication.

Females dominated the sample, as they do the profession of teaching. The characteristic of being female proved to predict a relatively more positive attitude toward language diversity. The correlation between gender and teacher certification sought reflected the reality that women also are more prevalent in elementary schools. Both were positively associated with language attitude. The third mediating variable that was significant was race/ethnicity. African-American, Hispanic, and other minority respondents were more positive toward linguistic diversity than white respondents.

The significance of the psychosocial variable political ideology pointed toward more tolerant language attitudes on the part of those who have more liberal political beliefs. Cognitive sophistication was correlated with greater tolerance toward language differences. Although all of the members of the sample are college students, the findings of the cognitive sophistication measure were evidence that complex, integrative reasoning, beyond simply years of education, predicts tolerant attitudes. Finally, psychological insecurity, or level of trust in people, negatively predicts level of tolerance

toward linguistic diversity. Higher psychological insecurity is associated with less tolerance.

Educators can look to this study to identify factors that influence the attitudes of pre-service teachers toward their very diverse future students. In addition to using the information to get a picture of the population teacher education will be guiding through the process of teacher preparation, the correlates can provide bases for curriculum and instruction planning.

Conclusions

One of the foremost concerns of teacher education is how to educate America's diverse student population. Controversy over standards for teachers and how to best prepare future teachers for license or state certification is on the front burner of the issues surrounding school reform. In the nineteenth century America needed a large workforce with basic skills, and teachers often were expected to have little more. The first half of the twentieth century saw attention to teaching preparation and standards that followed the political and educational landscape, but schools were largely thought to be delivering a "product" that was adequate for the marketplace. In the second half of the twentieth century, particularly after the Russian launch of Sputnik and the 1983 publication, A Nation at Risk, the standards movement came to the forefront. Standards for both teachers and students are hot issues because the twenty-first century requires a more highly skilled worker to compete in today's global economy (Wise and Leibbrand, 2000).

In order to develop standards that were more robust and widely adhered to, the National Council for Accreditation of Teacher Education (NCATE) came into being in

1954. Ultimately, NCATE's standards have come to focus on the academic quality of teachers and teacher candidate performance (Wise and Leibrand, 2000). "Preparing teachers who can bring classrooms of students with increasing disparate needs to ever higher levels of achievement has created a new agenda for educational policy makers. The status quo is crumbling. The norms for teacher preparation and licensing that we have known are beginning to change." (Wise and Leibrand, 2000, pp. 615-616)

NCATE standards expect both content knowledge and effective teaching performance. Teacher education programs have the task to assess candidates in both areas and use the information to improve teacher preparation. This study is concerned with the NCATE standard related to diversity. "The diversity standard expects institutions to prepare candidates who can help all children learn. Candidates should be able to develop a classroom climate that values diversity. Institutions are expected to provide candidates with field experiences that have diverse and exceptional populations. They are expected to incorporate diversity issues throughout the curriculum – not just simply in a single course on diversity." (Wise and Leibrand, 2000, p. 616) Characteristics of pre-service teachers as they relate to attitude toward language diversity are important so that teacher education can gain insight into the reality of the educational needs of the twenty-first century.

The correlation between gender and tolerance toward diversity was interesting to the extent that it showed a need for teacher education experiences to not only promote tolerance, but also to include sensitivity to gender related attitudes and tolerance, in general. Schools are important in transmission of values; tolerance can be encouraged

through knowledge and positive experiences. More women choose to teach at the elementary school level, and seeking elementary certification correlated with a more positive attitude. Implications of these findings are that additional emphasis on tolerance, with a focus on shared understandings that traverse gender issues, would be in order for the secondary and all-level programs. Content orientation coupled with curriculum and field experiences that promote tolerance could be targeted in all certification programs.

The findings concerning race/ethnicity and its prediction of more positive attitudes toward language differences on the part of minority pre-service teachers provided support for the idea that teacher education programs benefit from having diverse teacher candidates. Students as well as other members of the school community benefit from experience with minority teachers, and linguistic-minority students benefit from the role models they provide. More frequent contact with minority teachers could mitigate stereotypes and generate increased tolerance. More tolerant attitudes toward linguistic-minority students promote student success.

Political ideology, cognitive sophistication, and psychological insecurity are complex social and psychological constructs that influence the behaviors that reflect attitude. While all three contributed to the variation in language attitude of pre-service teachers, their implications for teacher education can be grouped to some extent. For example, curriculum and instruction that fosters critical reasoning, integrative thinking, and cognitive skills could positively influence all three. "The more cognitively complex an individual's reasoning style, the less likely he or she is to make rigid, prejudiced judgments." (Byrnes et al., 1996, p. 456) A commitment by teacher education to improve

attitude toward language diversity requires training, resources, and support for pre-service teachers to develop the knowledge and skills to work effectively with LEP students. Tetlock (1989) argues that complex reasoning is common when people are held personally responsible for their actions, or when they have to justify their actions. Thus, pre-service teachers who encounter value conflicts in their teacher education programs activate complex reasoning in response to the demand. This complex reasoning develops integrative thinking and mitigates prejudice (Byrnes et al., 1996).

Teacher education must inform pre-service teachers' practice with knowledge and strategies that value and celebrate differences in the student body of K-12 schools. Aspiring teachers, along with teachers already in practice, need skills and knowledge to help them take advantage of the strengths that result from diversity of culture, race, ethnicity, home and community experiences, as well as language. Demographic changes in the school population will increase manifest differences that create opportunities and trials for future teachers and teacher education programs charged with providing quality, meaningful pre-service experiences. Equal access to learning relies on curriculum and instruction that acknowledges both the enriched environment and the challenge of diversity. Skills and resources, coupled with positive attitudes toward language diversity, encourage inclusive, multidimensional classrooms that honor differences and counter alienation. Teacher education has the mandate to make a difference against this backdrop of multilingual diversity.

Recommendations for Further Research.

After examining the findings of this study, several areas warrant recommendations for further research. First, methodological issues should be considered, and, second, applications to the conclusions of the study need to be pursued.

The first issue related to methodology is the variable regionality. Methodology that is constructivist might provide more insight into this area. Ethnography, discourse analysis, or dialectology using the linguistic variable has the potential to illuminate this area. Second, qualitative investigation of the same areas of inquiry as this study possibly would provide corroboration of these findings, or would provide insight into the findings only possible through rich description of the setting.

This study used the LATS scale to measure attitude toward language differences and linguistic-minority students. The mean score of this sample of pre-service teachers was higher than the mean score of the regular-service teachers who comprised the sample on which the instrument was validated. Therefore, further research would be in order to determine if this difference is significant, and, if so, to determine if the difference is due to particular characteristics of the respective samples.

Findings of the study concerning gender and teacher certification sought should be investigated in order to maximize insight into the associated characteristics that promote positive attitudes. The race/ethnicity correlation with positive attitudes toward language differences should also be explored, particularly to address teacher recruitment and retention and its importance for K-12 students. Research could provide better understanding of the positive influence of a diverse teaching force.

Also, some of the correlations, while not suggestive of multicollinearity, do raise interesting questions with implications for teacher education that should be explored.

The psychosocial correlates of this study, political ideology, psychological insecurity, and cognitive sophistication, point to the need for teacher preparation that promotes critical thinking and integrative reasoning. Further research into specific curricular elements or instructional strategies that provide opportunities for growth in these areas is in order.

APPENDIX A

Pre-Service Teachers' Attitudes Toward Language

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Pre-Service Teachers' Attitudes Toward Language

Please respond to the following questionnaire based on your own interpretations of the items. Your input is completely anonymous and confidential. Participation does not influence your grades or standing in the Teacher Education Department of the College of Education.

I. Demographic Information

Gender (Circle your response): 1. *Female* 2. *Male*

Age in years: _____

II. Race/Ethnicity (Circle your response)

1. *White, Not Hispanic*
2. *African-American*
3. *Hispanic*
4. *Other (Asian/Pacific-Islander/Native American/Other)*

III. Teacher Certification Sought (Circle your response)

1. *Elementary*
 2. *Secondary*
 3. *All-Level*
-

IV. Politics (Circle your response)

Choose the description that most closely describes your political beliefs.

1. *Extremely liberal*
 2. *Liberal*
 3. *Moderate*
 4. *Conservative*
 5. *Extremely Conservative*
-

V. Regionality

Please provide the following information about where you are from.

Where were you born? (What town, city, state?) _____

Where were you raised from approximately ages 8 to 18? _____

Where do you live now? _____

Where was your mother born? _____ Father? _____

Do you consider yourself (Circle one) URBAN, SUBURBAN, or RURAL?

What do you consider home? _____

VI. Viewpoint

Read the following statements and circle only one response that most closely reflects your attitude.

A. If you don't watch out, people will take advantage of you.

1. *Strongly Agree* 2. *Agree* 3. *Disagree* 4. *Strongly Disagree*

B. If a person doesn't look out for him/herself, nobody else will.

1. *Strongly Agree* 2. *Agree* 3. *Disagree* 4. *Strongly Disagree*

C. Life is basically a struggle for survival.

1. *Strongly Agree* 2. *Agree* 3. *Disagree* 4. *Strongly Disagree*

VII. Help

Read the following statement and circle only one response that most closely reflects your attitude.

A. Would you say that most of the time people try to be helpful, or that they are mostly just looking out for themselves?

1. *Try to be helpful* 2. *Just look out for themselves* 3. *Don't know*

VIII. Language Attitudes of Teachers Scale

Read each statement then circle only one response for each statement that most closely reflects your attitude.

A. To be considered American, one should speak English.

1. *Strongly disagree* 2. *Disagree* 3. *Uncertain* 4. *Agree* 5. *Strongly agree*

B. I would support the government spending additional money to provide better programs for linguistic-minority students in public schools.

1. *Strongly disagree* 2. *Disagree* 3. *Uncertain* 4. *Agree* 5. *Strongly agree*

C. Parents of non- or limited-English-proficient students should be counseled to speak English with their children whenever possible.

1. *Strongly disagree* 2. *Disagree* 3. *Uncertain* 4. *Agree* 5. *Strongly agree*

D. It is important that people in the U.S. learn a language in addition to English.

1. *Strongly disagree* 2. *Disagree* 3. *Uncertain* 4. *Agree* 5. *Strongly agree*

E. It is unreasonable to expect a regular-classroom teacher to teach a child who does not speak English.

1. *Strongly disagree* 2. *Disagree* 3. *Uncertain* 4. *Agree* 5. *Strongly agree*

F. The rapid learning of English should be a priority for non-English-proficient or limited-English-proficient students even if it means they lose the ability to speak their native tongue.

1. *Strongly disagree* 2. *Disagree* 3. *Uncertain* 4. *Agree* 5. *Strongly agree*

G. Local and state governments should require that all government business (including voting) be conducted only in English.

1. *Strongly disagree* 2. *Disagree* 3. *Uncertain* 4. *Agree* 5. *Strongly agree*

H. Having a non- or limited-English-proficient student in the classroom is detrimental to the learning of the other students.

1. *Strongly disagree* 2. *Disagree* 3. *Uncertain* 4. *Agree* 5. *Strongly agree*

I. Regular-classroom teachers should be required to receive pre-service or in-service training to be prepared to meet the needs of linguistic minorities.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

J. Most non- and limited-English-proficient children are not motivated to learn English.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

K. At school, the learning of the English language by non- or limited-English-proficient children should take precedence over learning subject matter.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

L. English should be the official language of the United States.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

M. Non- and limited-English-proficient often use unjustified claims of discrimination as an excuse for not doing well in school.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

N. Regular-classroom teachers should be required to receive pre-service or in-service training to be prepared to meet the needs of linguistic minorities.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

O. Most non- and limited-English-proficient children are not motivated to learn English.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

P. At school, the learning of the English language by non- or limited-English-proficient children should take precedence over learning subject matter.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

Q. English should be the official language of the United States.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

R. Non- and limited-English-proficient often use unjustified claims of discrimination as an excuse for not doing well in school.

1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree

IX. WORDSUM

We would like to know something about how people go about guessing words they do not know. On this page are listed some words -- you may know some of them, and you may not know quite a few of them.

On each line the first word is in capital letters -- like BEAST. Then there are five other words. Tell me the number of the word that comes closest to the meaning of the word in capital letters. For example, if the word in capital letters is BEAST, you would circle "4" since "animal" comes closer to BEAST than any of the other words.

These words are difficult for almost everyone -- just give your best guess if you are not sure of the answer. CIRCLE ONE NUMBER FOR EACH ITEM BELOW.

Example

BEAST

1. afraid

2. words

3. large

4. animal

5. board

A. WORDA

B. WORDB

C. WORDC

D. WORDD

E. WORDE

F. WORDF

G. WORDG

H. WORDH

I. WORDI

J. WORDJ

APPENDIX B

Pre-Service Teachers' Attitudes Toward Language

Gatekeeper Cover Letter

APPENDIX B

Patricia A. Leek

Doctoral Candidate

University of North Texas

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1/17/00

Dr. Professor

College of Education

University of North Texas

Denton, Texas

Dear Dr. *Professor*,

I am currently conducting research for my dissertation that examines the attitudes of our pre-service teachers concerning language diversity. This study will give teacher education programs information that will assist in planning learning experiences that are responsive to the linguistic and cultural diversity found in K-12 schools.

I will greatly appreciate it if you will allow me to collect this data from your (*name of class*) students at the beginning of the spring semester, 2000. The exact date and time that I come to your class will be at your convenience. I realize that your class time is very

valuable, and I will expedite the administration of the 34-item survey (attached) in about 15 minutes.

Participation by your students is voluntary, confidential, and anonymous. They may withdraw at any time without penalty or prejudice. The surveys do not include student names and are not numbered or in any other manner marked for origin. I will compile the results; individual responses will not be reported. If you want to contact me concerning the study, I can be reached on campus at (*phone number*) or by Email (*Email address*). You may also contact my major professor, (*Name and phone number*).

This project has been reviewed and approved by the UNT Committee for the Protection of Human Subjects. Thank you in advance for allowing me this opportunity. I will be honored to share the results with you upon completion of the study.

Sincerely,

Patricia A. Leek

APPENDIX C

Pre-Service Teachers' Attitudes Toward Language

Respondent Cover Letter

APPENDIX C

Patricia A. Leek
Doctoral Candidate
University of North Texas
Denton, Texas

January, 2000

Teacher Education Student
University of North Texas
Denton, Texas

Dear Teacher Education Student,

I am currently conducting research for my dissertation that examines the attitudes of pre-service teachers concerning language diversity.

I realize that your class time is very valuable, and I will expedite the administration of the 34-item survey (attached) in about 15 minutes. Your participation is voluntary, confidential, and anonymous. You may withdraw at any time without penalty or prejudice. The surveys do not include your name and are not numbered or in any other manner marked for origin. I will compile the results; individual responses will not be reported. If you want to contact me concerning the study, I can be reached on campus at *(phone number)* or by Email *(Email address)*.

This project has been reviewed and approved by the UNT Committee for the Protection of Human Subjects.

Thank you in advance for allowing me this opportunity.
Sincerely,

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